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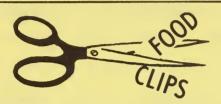




# Food and Home Notes

UNITED STATES DEPARTMENT OF AGRICULTURE OFFICE OF COMMUNICATION WASHINGTON, D. C.

April 7, 1975



Does the shell color of an egg affect the nutritive value? No. Shell color is determined by breed of hen and does not affect the nutritive value of quality of an egg.

\*

Leftover yolks from baking? Those leftover yolks may be kept in cold water and stored in the refrigerator in a tightly closed container. But, use as soon as possible.

\*

Extra egg whites may also be refrigerated and stored in a tightly covered container.

\*

Rust on a can is not necessarily harmful. The important thing to remember to check is if it penetrates the can?

\*

Did you know that one half cut of most boiled vegetables contains less than 50 calories? Don't pass them up while you're weight watching.

\*

Don't forget to cover potatoes with water to prevent darkening.

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## RARE BONSAI PLANTS

To Be At Arboretum

Fifty Bonsai plants—a rare and priceless collection from Japan—will be a part of the National display at the U.S. Department of Agriculture's Arboretum in Washington, D.C. when formal ceremonies are planned in July '76, as part of the Bicentennial celebration.

This collection will represent some of Japan's most treasured and valued specimens, some dating back more than 400 years, according to Dr. John Creech, Director of the U.S. National Arboretum, who accepted the plants for the United States. The public viewing will be planned after the display is permanently quartered in a natural Japanese garden setting. A special viewing pavilion is also being designed to permit visitors to see the plants to best advantage.

6078

USDA 909-75

#### COST OF FOOD AT HOME FOR A WEEK (February)

Low-Cost Plan	Moderate-Cost Plan	Liberal Plan
25.00 39.70	\$35.10 30.80 49.40	\$42.00 36.70 58.90 72.00
70.30	00.20	,2.00
	14.10 12.60	16.80 14.90
	17.80 15.40	21.40 18.50
7.70 10.10 12.60 11.90 13.40	7.90 9.60 12.60 15.70 14.70 16.70 18.40	9.30 11.40 15.00 18.80 17.50 19.90 22.00
	\$28.20 \$25.00 39.70 ry 48.30 11.40 10.20 14.20 12.50	\$28.20 \$35.10 25.00 30.80 39.70 49.40 ry 48.30 60.20 11.40 14.10 10.20 12.60 14.20 17.80 12.50 15.40 12.50 15.40

\* Food cost for any family can be figured by totaling costs shown in table for individuals of sex and age of various members of the family as follows:

- o For those eating all meals at home (or carrying some meals from home), use amounts shown.
- o For those eating some meals out, deduct 5 percent from amount in table for each meal not eaten at home. Thus, for a person eating lunch out 5 days a week, subtract 25 percent or one-fourth the cost shown.
- o For guests, include for each meal eaten, 5 percent of amount shown in table for the proper age group.

Next, adjust the total figure if more or fewer than four people generally eat at the family table. Costs shown are for individuals in 4-person families. Adjustment is necessary because larger families tend to buy and use foods more economically than smaller ones. Thus, for a 1-person family, add 20 percent; 2 persons, add 10 percent; 3, add 5 percent; 4, use as is; 5, subtract 5 percent; 6 or more, subtract 10 percent.

Note: Single copies of a paper describing the 1974 USDA food plans, on which these costs are based, are available from the Consumer and Food Economics Institute, Agricultural Research Service, USDA, Hyattsville, Md. 20782.

## USDA RESEARCH

ON Blended Beef

Experimental blends of beef with high-protein products from other animal sources or from plants have nearly the same protein nutritional value as 100 percent lean beef, according to a U.S. Department of Agriculture scientist, Muriel L. Happich of the Agricultural Research Service. Ms. Happich's studies at the ARS Eastern Regional Research Center in Philadelphia, Pa., included animal protein from meat byproducts, whey and fish, as well as plant proteins.

Red meat provides man with one of his most valuable food proteins. Its nutritive value, taste appeal, and consumer acceptance are high. Lean beef proteins have a Protein Efficiency Ratio (PER is a measurement of protein quality) slightly higher than that of casein, the major milk protein. A PER value of 2.5 for casein has been accepted as a standard. On this basis, lean beef protein has a PER of 2.8.

A number of protein products can be usefully blended with meat in faily substantial quantities without lowering the PER below that of casein according to this research. The meat byproduct proteins used in the research were partially defatted beef fatty tissue (PDBFT, the protein-fat residue from low-temperature rendering of beef fat) and cattle blood fractions. The other animal proteins were from whey (a cheese byproduct) and from a fish concentrate.

The two plant proteins were from soy and cottonseed—the cottonseed protein is a research product of the ARS Southern Regional Research Center, New Orleans, La., and is made by a liquid cyclone process.

With the exception of the fish and whey proteins, these products have relatively low PER values which limit the extent to which they can be used in meat blends without appreciably lowering the nutritive value. But, it is not only their effect on ritive value, but also their effect on taste and consumer acceptance that determines the extent to which they can be blended with meats.

Food and Home Notes

More on...Blended Beef

Another protein to add to this list is cattlehide collagen. It can make an important contribution to meat blends by virtue of its texturing effect. A tasteless, odorless, fibrous protein, collagen is present naturally in meat in small quantities. If some of the other protein products affect the texture of meat when blended in sizeable quantities, a little added collagen can be expected to restore the natural texture. The unique properties of collagen give it a potential for varying the viscosity and consistency of meat products to meet consumers' expectations.

The research in this area has shown that the various animal and plant proteins can be added to lean beef protein without lowering the PER below that of casein.

Tests showed that this can be achieved with a level of whey, fish, soy, or cottonseed proteins as high as 30 percent.

Ms. Happich suggested the possibility that the PER of blends of lean beef and soy might more closely approach that of 100 percent lean beef is they were combined with protein from a third source like whey, fish, or blood plasma. Experiments on the nutritional value of such mixtures are now in progress, Mr. Happich said.

# WASTE WOOD PRODUCTS

... and their potentials

And who said that yesterday's newspaper was only good to wrap fish in? Agricultural researchers are tapping still another use for old newsprint. Waste wood products, such as newspapers, have become the subject of investigations to discover their potential as energy sources for ruminant animals. According to researchers newsprint could comprise 8 percent of the coarse substance in the ration — in other words, animals could digest cellulose of woody tissue and utilize it as if it were cellulose from forage.

NOTE: Additional information for the MEDIA and photographs (when applicable) may be obtained from: Shirley Wagener, Editor of Food and Home Notes, Room 535A, Office of Communication/Press Division, U.S. Department of Agriculture, Washington, D.C. 20250. Or telephone 202-447-5898.